

- 33 -

### CLAIMS

1. A CXCL8 antagonist comprising a mutant sequence of human mature CXCL8 polypeptide (SEQ ID NO: 2), characterized in that at least the two basic residues  
5 Lysine 64 and Lysine 67 of said polypeptide are substituted to Alanine, Glycine, Serine, Threonine, Proline, Glutamic Acid, Glutamine, Aspartic Acid, or Asparagine.
2. The CXCL8 antagonist of claim 1 characterized in that a third basic residue is  
10 substituted to Alanine, Glycine, Serine, Threonine, Proline, Glutamic Acid, Glutamine, Aspartic Acid, or Asparagine.
3. The CXCL8 antagonist of claim 2 characterized in that the mutant sequence is CXCL8-1B3 (SEQ ID NO: 4), or CXCL8-2B3 (SEQ ID NO: 6).  
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4. The CXCL8 antagonist of any of the claims from 1 to 3, characterized in that said antagonist is an active mutants in which one or more amino acids have been added, deleted, or substituted.
- 20 5. The CXCL8 antagonists of claim 4 wherein the one or more amino acids that have been added, deleted, or substituted in the active mutants belong to the first six amino acids in the amino-terminal domain of the mature human CXCL8.
6. The CXCL8 antagonists of any of the claims from 1 to 5, characterized in that  
25 said antagonist comprises an amino acid sequence belonging to a protein sequence other than human mature CXCL8.

- 34 -

7. The antagonists of claim 6, characterized in that said antagonist comprises the amino acid sequence belonging to one or more of these protein sequences: extracellular domains of membrane-bound protein, immunoglobulin constant  
5 region (Fc region), multimerization domains, signal peptides, export signal-containing proteins, and tag sequences.
8. The CXCL8 antagonist of any of the claims from 1 to 7, characterized in that said antagonist is in the form of an active fraction, precursor, salt, derivative,  
10 conjugate or complex.
9. The antagonists of claim 8, characterized in that said conjugate or complex is formed with a molecule chosen amongst radioactive labels, biotin, fluorescent labels, cytotoxic agents, or drug delivery agents.  
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10. The nucleic acid molecule comprising the DNA sequences coding for a CXCL8 antagonists of any of the claims from 1 to 7, including nucleotide sequences substantially the same.
- 20 11. The expression vector comprising the DNA molecule of claim 10.
12. A host cell transformed with a vector of claim 11.

- 35 -

13. Process for the preparation of a CXCL8 antagonist of any of the claims from 1 to 9, comprising culturing the transformed cells of claim 12 and collecting the expressed proteins.
- 5 14. A purified preparation containing at least 1% of the CXCL8 antagonists of claims from 1 to 9, or of the nucleic acid of claim 10 or 11.
15. The use of a CXCL8 antagonist of claims from 1 to 9, of a DNA of claim 10 or 11, or of a cell of claim 12, as a medicament.
- 10 16. The use of a CXCL8 antagonist of any of the claims from 1 to 9 as active ingredient in pharmaceutical compositions for the treatment or prevention of CXCL8-related diseases.
- 15 17. A pharmaceutical composition containing a CXCL8 antagonist of any of the claims from 1 to 9 as active ingredient.
18. Process for the preparation of pharmaceutical compositions for the treatment or prevention of a CXCL8-related disease, which comprises combining a CXCL8
- 20 antagonist of any of the claims from 1 to 9, or the cells of claim 10 or 11, together with a pharmaceutically acceptable carrier.
19. The use of a CXCL8 antagonist of any of the claims from 1 to 9 for the manufacture of a medicament for the treatment of autoimmune, inflammatory or
- 25 infectious diseases.

- 36 -

20. Method for the treatment or prevention of a CXCL8-related disease, comprising the administration of an effective amount of a CXCL8 antagonist of any of the claims from 1 to 9, the DNA of claim 10 or 11, or the cells of claim 12.